

Claims:

1. A lead-free solder consisting essentially of 7.0-10.0 wt% of Zn, 0.1-4.0 wt% of Ag, 0.01-0.5 wt% of Al, and the balance of Sn.
- 5        2. The solder as claimed in Claim 1 further comprising 0.1-4.0 wt% of Ga.
- 10      3. The solder as claimed in Claim 1 further comprising 0.25-0.5 wt% of Ga.
- 15      4. The solder as claimed in Claim 1, which comprises 0.25-0.5 wt% of Ag.
- 20      5. The solder as claimed in Claim 2, which comprises 0.25-0.5 wt% of Ag.
- 25      6. The solder as claimed in Claim 3, which comprises 0.25-0.5 wt% of Ag.
- 30      7. In an improved lead-free solder having Zn, Ag, and more than 75 wt% of Sn, the improvement comprising said solder further including 0.01-0.5 wt% of Al.
- 35      8. The solder as claimed in Claim 7 further including 0.1-4.0 wt% of Ga.
- 40      9. The solder as claimed in Claim 7 further including 0.25-0.5 wt% of Ga.